



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/465,436	12/16/1999	CHRISTOPHER MIDGLEY	NTK-005.01	8863

25181 7590 01/28/2002

FOLEY, HOAG & ELIOT, LLP
PATENT GROUP
ONE POST OFFICE SQUARE
BOSTON, MA 02109

[REDACTED] EXAMINER

ALAM, SHAHID AL

[REDACTED] ART UNIT [REDACTED] PAPER NUMBER

2172

DATE MAILED: 01/28/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/465,436	MIDGLEY ET AL.
	Examiner	Art Unit
	Shahid Al Alam	2172

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 16 December 1999.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-5 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-5 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claims _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are objected to by the Examiner.

11) The proposed drawing correction filed on _____ is: a) approved b) disapproved.

12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

15) Notice of References Cited (PTO-892)

16) Notice of Draftsperson's Patent Drawing Review (PTO-948)

17) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 8 .

18) Interview Summary (PTO-413) Paper No(s) _____.

19) Notice of Informal Patent Application (PTO-152)

20) Other: _____

DETAILED ACTION

1. The application has been examined. Claims 1 – 5 are pending in this office action.

Information Disclosure Statement

2. The reference cited in the information disclosure statement, IDS-FORM 1449, Paper No. 8 has been considered.

Drawings

3. This application has been filed with informal drawings, which are acceptable for examination purposes only. Formal drawings will be required when the application is allowed.

Claim Objections

4. Claim 1 is objected to because of the following informalities:

In claim 1, line 9, the term “directing the process to compare” should be “directing the processor to compare”.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 1 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Number 5,758,359 issued to Paul Saxon ("Saxon") in view of U.S. Patent Number 6,038,665 issued to Thomas Bolt et al. ("Bolt").

With respect to claim 1, Saxon teaches a process for storing data (see abstract), comprising:

providing a back up server having storage for a plurality of data files (column 4, lines 39 – 42 and 50 – 57),

providing a long term memory device having a plurality of data storage elements and a processor for coordinating the operation of the plural data storage elements (column 3, lines 55 – 66),

directing the processor to store data on the storage elements and for recording a time signal representative of the time of recording (column 4, lines 52 – 60),

identifying a condition representative of each storage elements having reached capacity (column 7, lines 19 – 27), and

directing the processor to compare the time signals for each data storage element to store data on the storage elements having the earliest recorded data (column 5, lines 39 – 45).

Saxon teaches the selection of maximum size for data to be backed up (column 7, lines 19 – 27).

Saxon does not detail the maximum size in terms of storage capacity.

Bolt teaches the selection of a limit of storage capacity during back-up operation (column 13, lines 24 – 42).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the capacity of storage units as taught by Bolt in Saxon to improve system performance by efficiently utilizing computing resources. In this particular instance, the capacity of storage unit is selected or defined by a user as a performance parameter (Bolt; column 13, lines 36-37).

As to claim 5, Bolt teaches that the processor to store data on the storage elements includes directing the processor to store data on each storage element until each storage element reaches capacity (column 13, lines 37 – 42).

8. Claims 2, 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saxon as applied to claim 1 above, and further in view of U. S. Patent Number 6,023,709 issued to Matthew Anglin et al., ("Anglin").

With respect to claim 2, 3 and 4, Saxon teaches the claimed subject matter as discussed in claim 1, except that Saxon does not explicitly teach a tape library having a plurality of drive elements and a robotic controller.

As to claim 2, Anglin, in a back-up system similar to Saxon, teaches a long-term memory device including a tape library system having a plurality of drive elements (column 3, lines 42 – 47).

As to claim 3, Anglin, in a back-up system similar to Saxon, teaches the tape library includes a robotic controller for moving tapes in an out of tape drive system (column 3, lines 48 – 50).

As to claim 4, Anglin, in a back-up system similar to Saxon, teaches the long-term memory device includes a raid storage system (column 3, lines 31 – 35).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to combine Anglin and Saxon because the tape library, robotic controller and RAID array provide additional hardware capabilities for the combined system and thus improve its robustness.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent 5,974,563 issued to Beeler, Jr. et al.

Information is replicated to a secondary storage media in real-time.

U.S. Patent 6,088,694 issued to Burns et al.

Continuous availability and efficient backup for externally referenced objects.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shahid Al Alam whose telephone number is (703) 305-2358. The examiner can normally be reached on Monday - Thursday 8:00 A.M. to 4:30 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Y. Vu can be reached on (703) 305-4393. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7239 for regular communications and (703) 746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Shahid Al Alam
Examiner, Art Unit 2172
October 31, 2001

Shahid Alam
SHAHID AL ALAM
PATENT EXAMINER